NEW ENGLAND FARMER.

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ORIGINAL COMMUNICATIONS.

A SKETCH OF VEGETABLE ANATOMY, VEGETABLE ECONOMY, &c.

[*Concluded from page* 345.]

CLASSIFICATION OF PLANTS.

The species of plants are so immensely numerous, that some mode of arrangement is absolutely necessary. Hence the vegetable kingdom is divided into Classes, Orders, Genera, Species and Varieties.

Classes may be compared to Nations.
Orders may be compared to Tribes or divisions of Nations.
Genera may be compared to Families that compose Tribes.
Species may be compared to Individuals that compose Families.
Varieties may be compared to Individuals under certain variations.

'The Linnæan system is founded on the number, situation and proportion of the essential organs of fructification, the stamens and pointals. The 24 classes principally owe their distinctions to the number, situation, and proportions of the stamens; the orders or divisions of the classes are marked by the number of pointals, or by some other circumstance equally intelligible. The first 11 classes are distinguished solely by the number of stamens; and the orders in the first 13 classes are founded on the number of pointals, or the number of stigmas where the styles are wanting. The names of both classes and orders are of Greek derivation, and refer to the functions of the respective organs.' Many of the names end with *andria*, male; or *gynia*, female.

CLASSES.	ORDERS.
1. Monandria. Stamen 1.	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2.
2. Diandria. Stamens 2. Ex. Lilac.	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2. 3. Trigynia " 3.
3. Triandria. Stamens 3. Ex. Grasses, Iris.	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2. 3. Trigynia " 3.
4. Tetrandria. Stamens 4. Ex. Plantain.	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2. 3. Tetragynia " 4.
5. Pentandria. Stamens 5. Ex. Honeysuckle, Elder.	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2. 3. Trigynia " 3. 4. Tetragynia " 4. 5. Pentagynia " 5. 6. Polygynia " many.
6. Hexandria. Stamens 6. Ex. Lily, Hyacinth.	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2. 3. Trigynia " 3. 4. Tetragynia " 4. 5. Hexagynia " 6. 6. Polygynia " many.
7. Heptandria. Stamens 7. Ex. Wintergreen.	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2. 3. Tetragynia " 4. 4. Heptagynia " 7.
8. Octandria. Stamens 8. Ex. Mezereon.	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2. 3. Trigynia " 3. 4. Tetragynia " 4
9. Enneandria. Stamens 9. Ex. Rheum.	1. Monogynia—Pointal 1. 2. Trigynia—Pointals 3. 3. Hexagynia " 6.
10. Decandria. Stamens 10. Ex. Kalmia, Pink.	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2. 3. Trigynia " 3. 4. Pentagynia " 5 5. Decagynia " 10
11. Dodecandria. Stamens 12 to 19. Ex. Snakeroot	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2. 3. Trigynia " 3. 4. Tetragynia " 4. 5. Pentagynia " 5. 6. Dodecagynia " 12 to 19.
12. Icosandria. Stamens 20, or more inserted into or growing out of the calyx. Ex. Strawberry, apple.	1. Monogynia—Pointal 1. 2. Pentagynia—Pointals 5. 3. Polygynia " many.
13. Polyandria. Stamens more than 20, numerous, inserted into the receptacle. Ex. Poppy.	1. Monogynia—Pointal 1. 2. Digynia—Pointals 2. 3. Trigynia " 3. 4. Tetragynia " 4. 5. Pentagynia " 5. 6. Hexagynia " 6. 7. Polygynia " many.
14. Didynamia. Stamens 2 long and 2 short. Flowers labiate, singent or personate in general. One pointal only.	1. Gymnospermia. Seeds naked in the bottom of the calyx, generally four; plants aromatic. Ex. Mint. 2. Angiospermia. Seeds numerous in a capsule; plants handsome, &c. Ex. Foxglove.
15. Tetradynamia. Stamens 4 long and 2 short. Cruciform flowers.	1. Siliculosa. Fruit in a roundish pod. Ex. Lunaria. 2. Siliquosa. Fruit in a long pod. Ex. Mustard, Radish.
16. Monadelphia. Stamens united by their filaments into one tube, separated at the top. Ex. Althæa, Hibiscus. The number of stamens being here of secondary importance, serves to discriminate the orders in this and the two next classes.	1. Triandria. Stamens 3. 2. Pentandria " 5. 3. Heptandria " 7. 4. Octandria " 8. 5. Enneandria " 9. 6. Decandria " 10. 7. Dodecandria " 12 to 20. 8. Poliandria " many.
17. Diadelphia. Stamens united by their filaments into two separate parcels, both sometimes cohering at the base. Flowers papilionaceous. Ex. Pea, Bean.	1. Pentandria " 5. 2. Hexandria " 6. 3. Octandria " 8. 4. Decandria " 10.
18. Polyadelphia. Stamens united by their filaments into more than two parcels. This class is now, by many rejected, and the plants distributed in other classes.	1. Dodecandria. Stamens, or rather anthers, from 12 to 20. Filaments inserted into the receptacle. 2. Icosandria. Stamens numerous; filaments inserted into the calyx. 3. Polyandria. Stamens very numerous, inserted into the receptacle.
19. Syngenesia. Flowers compound. The anthers united into a tube, over a single seed. The orders are founded on the situation of the several kinds of florets. Some florets have both stamens and pointals; some have the one, and some the other; and some are destitute of any that are effectual. Polygamia is the family name applied to all the orders, and implies that there are many florets inclosed within one common calyx.	1. Polygamia æqualis. The florets perfect, each having stamens, &c, pointal, as in the dandelion. 2. Polygamia superflua. The florets in the disk perfect, having stamens and pointals; those in the ray or margin having pointals only, but all producing fertile seed, as in the field daisy, yarrow, aster, &c. 3. Polygamia frustranea. The florets in the disk perfect; those of the margin having no pointal, or no effectual one, are neuter, as in the sun-flower. 4. Polygamia necessaria. The florets in the disk having only stamens, are neuter; those of the margin having only pointals, and are fertile, as in the marigold. 5. Polygamia segregata. The florets all perfect, each having its own proper calyx besides the one common to all, as in the globe thistle.
20. Gynandria. Stamens inserted on the pointal. The orders are marked by the number of Stamens. Ex. Lady's slipper.	1. Monandria, stamen 1. 2. Diandria, stamens 2. 3. Triandria " 3. 4. Tetrandria " 4. 5. Pentandria " 5. 6. Hexandria " 6. 7. Octandria " 8.
21. Monœcia. Stamens and pointals in separate flowers, but on the same plant. Ex. melon, Indian corn, chesnut, hazel, &c. The orders of this class and the next are distinguished by the number of stamens, or by some other character of the preceding classes.	1. Monandria, stamen 1. 2. Diandria, stamens 2. 3. Triandria, " 3. 4. Tetrandria, " 4. 5. Pentandria " 5. 6. Hexandria " 6. 7. Poliandria, " many. 8. Monadelphia, filaments united into a tube. 9. Polyadelphia, filaments united into more than two parcels.
22. Dicœcia. Stamens and pointals in separate flowers, but on two separate plants. Ex. hemp, willow, &c.	1. Monandria, stamen 1. 2. Diandria, stamens 2. 3. Triandria " 3. 4. Tetrandria " 4. 5. Pentandria " 5. 6. Hexandria " 6. 7. Polyandria " many. 8. Monadelphia, filaments united into a tube.
23. Polygamia. Stamens and pointals separate in some flowers, united in others, on one, two or three separate plants of the same species. This class has been rejected, and the plants incorporated with other classes.	1. Monœsia. When the several kinds of flowers grow on one single plant. 2 Dicœsia. When they are situated on two separate individuals. 3 Triœsia. When they are placed three separate plants.
24. Cryptogamia. Stamens and pointals obscure, and not well ascertained as to number.	1. Filices. Ferns, which bear their seed on the back of the leaf, and hence called a frond. 2. Musci. Mosses. A hardy family. 3. Hepaticæ. Liverworts, generally bearing the seed on the leaf. 4. Algæ, Flags. These are frondose. This order includes the numerous tribe of sea weeds. 5. Fungi, Mushrooms, &c. They are of quick growth and of short duration, some are poisonous and none fit for the human stomach.

The orders are divided into *genera* or families, each of which consists of one or more species or individuals, which agree with each other in the general appearance of their flower and fruit, and disagree with all other genera as to form and nature, as in the families of roses and lilies. The generic and essential character is that mark or marks which distinguish the different genera one from another, and these distinguishing marks are

taken only from the seven parts of fructification, unnoticed in the definitions of the classes and orders. The genus has all the marks of its classes and order, and some others peculiar to itself.

The genera are divided into species, or individuals. The specific character is that peculiar mark or marks which distinguish the different species, one from another, and these distinguishing marks are taken from all parts of the plant not noticed in the definitions of the classes, orders and genera. The roots, stems, form of the leaves, appendages, &c, afford distinctions that mark the species. The species has all the marks of its class, order, and genus, and some others peculiar to itself.

The varieties of the species happen from casual causes, generally from seed, or cultivation, or both; and are numerous in the apple family.

Let one example suffice.

CLASS.	ORDER.	GENUS.	SPECIES.	VARIETIES.
Icosandria.	Pentagynia.	Pyrus.	Apple.	Baldwin, Russet, &c.
			Pear.	Ambretto, Seckle, &c.
			Quince.	Fall, Winter.

When an unknown plant is found, first count the stamens and pointals, and notice any other circumstance attending these organs (as to proportion, situation, &c,) on which the character of the classes and orders are founded. Having thus easily ascertained the class and order to which the plant belongs, next, in some practical work on the subject, compare the parts of its flower and fruit with the characters of every genus in that order, until the one is found with which it agrees. Having thus found the generic or family name, next, in like manner, read over the character of the species, if the genus consist of more than one, until the one is found that applies. Thus the generic and specific name of the plant is found.

A little practice will be necessary to render the classes and orders familiar, beginning with the tulip, lily and rose, and such flowers as have the essential organs most conspicuous. A magnifier will be necessary to inspect small flowers.

A few observations by which the qualities of many plants may be known.

Plants with a glume calyx, as in rye, Indian corn, &c, are wholesome.

Whenever the stamens are found to grow out of the calyx, whether they be many, as in Icosandria, or few, as in the currant, they indicate the fruits of such plants to be wholesome.

The whole class, Tetradynamia, stamens 4 long and 2 short, having cruciform flowers is wholesome.

Plants having a papilionaceous or pea flower, mostly belonging to the class Diadelphia are wholesome. Wild indigo and the seeds of laburnum are exceptions.

Plants belonging to the class Syngenesia are harmless.

Plants belonging to Didynamia Gymnospermia, and the ringent flowers with naked seeds allied thereto, which having two stamens, are of course placed in the class Diandria, are all harmless or wholesome. Those plants which belong to the same class, but to the second order Angiosperma, seeds in a seed vessel are narcotic and dangerous, being allied to those plants, having five stamens and one pointal with nauseous flavor, in class and order Pentandrio Monogynia, known to be poisonous.

Umbelliferous plants having 5 stamens and two pointals growing on a dry soil and of agreeable odor, are generally harmless aromatics; but those growing in a wet soil with nauseous flavor are generally poisonous.

Whenever the nectary is a distinct organ from the corolla, the plants to which it belongs are to be suspected.

Plants producing a white substance when cut or broken, except such as have compound flowers are to be suspected.

The liliaceous tribe are often dangerous, especially the roots.

The wholesome qualities of plants are generally indicated by an agreeable flavor and taste; the dangerous ones, generally having a disagreeable flavor and nauseous taste.

We have now gone through with what was intended, merely a general view of the subject, and shall conclude with a few remarks.

The structure of plants and the manner in which nature takes to continue the species are subjects of admiration, and to many an inexhaustible source of delight. They show to man the wisdom, goodness, and power of the munificent Creator. Shall any one despise those productions, which the Creator hath pronounced, 'very good,' as useless and unworthy the notice of man, for whom they were made? Every plant was made with a design to answer some important purpose in the great scale of nature. There is not a flower, nor leaf, nor bud, but what shows traces of infinite power and wisdom. The mysteries of vegetation have excited the attention of the wisest and the best of men, and they are not yet unfolded. The most profound philosopher can explain only a small part of the wonderful process of nature in the formation of a single plant. The heedless observer of a single leaf is not aware of the chemical process, that is carried on in its substance, forming various compounds.

The study of vegetable economy is highly interesting to the young cultivator of the soil. The more the subject is understood the more pleasing and interesting it becomes. It is peculiarly proper for the youth in general. It is not like novels and romances, (with which the world is overloaded,) which corrupt the passions, create a false taste, enervate the mind and of course the body, and afford no useful knowledge whatever; but on the contrary, it softens the passions, improves the taste, enlightens the understanding, affords much useful information, and teaches us the wisdom and power of the Creator in his works.

As to Horticulture, with which our subject seems more closely connected, it is based on the best foundation, being established in the fitness of things by infinite wisdom. It was the first employment of man. An exercise the most conducive to health, and human happiness. 'The Lord God planted a garden,' in which he 'made to grow' the most choice and beautiful plants and trees, both for use and ornament, even 'every tree that is pleasant to the sight and good for food, and there he put the man whom he had formed, to dress, prune and order,' the various species, 'and to keep it,' from the ravages of insects and other creatures which might injure it.

This garden, planned and executed by the Supreme Being, must have been a place of consummate delight. All was peace and harmony, order and neatness, beauty and innocence. The shady groves and the meandering stream, which watered the garden, added grandeur to the scenery. There bloomed the lily and the rose, whose fragrance spread a rich perfume, and whose beauties declared 'their maker God.' And in the 'midst,' there stood a tree, now lost, the life preserving tree, whose healing virtues would restore lost immortality, and insure perpetual youth and vigor. The gardener, however, proving unfaithful and disobedient, was not permitted to receive its benefits; but was expelled from this place of bliss, and much was lost.

There is something peculiarly pleasing in a garden—a thousand objects are presented to view, affording instruction; health is promoted; the mind invigorated, and the best feelings cultivated. It serves both for exercise and diversion, retirement and contemplation, and smooths the 'pathway to the tomb.'

> 'Go view the path by nature trod,
> And lift your thoughts to nature's God.'

Let all who can, plant a little paradise, and so 'dress and keep it,' as that, from its order and neatness, it shall have some faint resemblance to the one above faintly described, and by continuance in well doing, receive a rich reward.

ERRATA.—Page 338, col. 1, 19th line from top, for 'acaulis' read a caulis—page 346, 1st col. line 15, for 'pettate' read peltate—line 22, for 'vagiment' read vaginant—line 32, for 'and' read end—page 353, 3d col. 62d line, for 'as in the calyx' read the calyx—page 354, 2d column, 20th line, for 'cymore' read cymose.

FOR THE NEW ENGLAND FARMER.

A FAINT TIME

It is now for horses; when the warmth of the season is gradually increasing, their labor comes harder upon them, and if the constitution is not perfectly sound, it will show itself, and may require occasionally some assistance. A careful master should know how to treat, and how to doctor his own horse, and avoid administering strong medicines with the effects of which he is not well acquainted. I have owned but few horses and have kept them until nearly worn out by age. I have found the use of salt to be very valuable; it gives much firmness to a horse, and if he is troubled with worms the steady use of it will by degrees clear them away; this daily pickling they will not bear long. I generally give my horse *soaked* corn; that is, throw water over it about twentyfour hours before it is used; this method saves time and toil, and the corn being softened, it saves the horse's teeth, and getting more perfectly masticated goes further for food. A good handful of salt is thrown over it at feeding time; however, if a horse is perfectly firm and sound, the use of salt may be omitted now and then for a short while, and then begun again. It is a safe guardian and ought not to be discontinued long.

As an alterative medicine, I have found aloes to be invaluable; they strengthen the organs of digestion and respiration, and when a horse is troubled in any manner in his wind, and when his stomach is out of order, either by flatulency, costiveness, or want of appetite, the use of aloes will be of great service to him. It should be given reduced to a fine powder, in small doses, not exceeding four drachms at a time, and mixt with the horse's grain; after a few days it should be discontinued for a while, when the use of it may be resumed, as there appears to be a necessity for it. Said dose mixt with a small quantity of rasped rhubarb, and continued for a few days, will purge, and is the safest medicine for a horse. Calomel

and other powerful articles, generally called horse medicines, had better be avoided unless in extreme cases. Aloes are the dessicated juice of a plant, look somewhat like rosin, if of a good quality is very friable, and has a strong and pleasant bitter smell; the best comes from the Island of Succotrina. There is a coarser and impure kind from Barbadoes; it is found in general in the druggists' shops in Boston, and sold by them in lumps at a low price for its real worth. I will conclude this communication with the receipt of a simple and cheap embrocation, such as found in, and which I copy verbatim from a valuable small volume published some years ago in London, by Philip Astley, a man of great experience in all matters relating to horses.

For strains, wrenches, and windgalls from the knee to the hoof.

'The following simple and cheap embrocation 'will be found serviceable in curing all those casu-'alties.

'Take of oil of turpentine, double distilled vin-'egar, and spirits of wine, each a gill; but observe 'to mix first with the turpentine alone, the whites 'of two eggs in order the better to dissolve them; 'blend the whole together, and rub the part affect-'ed with it, night and morning, using a flannel 'wrapper to keep it warm; so efficacious is this 'medicine, that there is scarcely a strain, or bruise 'but it will cure, if the bone is not injured; but 'should the bone be hurt, it is necessary then to 'foment the part with such common herbs as are 'used on such occasions; this must be done before 'you embrocate the part; the best manner is to 'take a piece of double canvas, using a stick to 'each end, then steep a piece of flannel in the fo-'mentation, and having wrung it rather dry, by the 'aid of the canvas and sticks, apply it as hot to 'the strain, &c, as the horse can possibly bear it, 'covering it with a horse cloth. Having repeated 'this application several times, let the part be rub-'bed entirely dry, and then bathed with the embro-'cation twice every day, for three days together, 'then once a day; and thus discontinue it, in pro-'portion as the disease disappears. The fomenta-'tion may be used as often as you think proper, in 'all cases where the bone has received any injury; 'but when the sinews, muscles, and nerves are on-'ly strained, the embrocation may be found suffi-'cient; care must be taken that you do not use it 'more than six times successively, lest it should 'bring off some of the hair.'

This embrocation I have generally kept ready for use many years, and for want of double distilled vinegar have found strong cider vinegar, old and clear, to answer the purpose; it has been used by myself, and occasionally by neighbors with much satisfaction. The results of experience in matters relating to agriculture, however trifling individually they may appear, collectively will form in time, a valuable volume for the Farmer; this volume, Mr Editor, under your fostering care, is fast thriving in the pages of the *New England Farmer*, and it is an encouragement for your friends to offer their mite occasionally.

With much esteem, yours &c.

Weston, June 1, 1830. J. M. G.

THOMAS G. FESSENDEN, ESQ.,
Editor of the New England Farmer.

Death to Caterpillars, &c.—The conductor of the Gardener's Magazine says, 'We can affirm from almost daily experience, that strong lime water will kill every kind of caterpillar, and even worms, snails, lizards, frogs, toads, snakes, and fishes.'

MAKING BUTTER.

MR THOMAS G. FESSENDEN—

Sir—Having lately obtained a patent for a new invented Churn, which reduces the labor of making Butter to a mere pastime for a stripling, and relieves our country lasses from the tormenting fears of the dreadful task, I am desirous (through your assistance) of communicating to the public the principle of the machine, and do not know that I can do it in a more concise manner than by giving you the specification as forwarded to the Patent Office to obtain the grant.

The new invented Churn is of an oblong form, standing upon its own bottom, twentyfour inches long, twentyfour inches high, and twelve inches wide, with two cog wheels on the outside, one of ten inches diameter, running upon a shaft which supports and turns a wheel of dashers, four in number, within the Churn; at the opposite end of this shaft is a large fly wheel, as a momentum or impetus to the dash wheel, which may be removed to the end of the small wheel shaft that runs through the churn. The small cog wheel is of 5 inches diameter, runs upon its own shaft, and connects itself with the large cog wheel, has a winch or crank on its shaft eight inches in length, which in turning moves the large wheel, that turns the dashers within the churn, and the fly wheel facilitates the operation.

The advantage of this churn over all others now in use, is the introduction of a double lever power on the shaft that turns the dashers; it is well known to all dairy women that when the cream is brought to a state for separating, and the butter collecting and combining into a body, that the labor of churning increases and constitutes the most fatiguing part of the operation, but from the effect of this artificial power, *(a lever acting upon a lever)* a force required in making other churns, is greatly reduced, and affords a lad of 12 years old the power of making 30 lbs. of butter with as much speed, and less labor than any method as yet known or used. It is a general observation that butter made in our state is very inferior to that made in other States, and no reason can be assigned but the want of care, knowledge, and attention, in working out the butter milk and all impure air it may contain. Our materials are most certainly equal, if not superior to our neighbors', and if an excitement to competition could be introduced into our daily market by giving an extraordinary price for good butter, it might prove a great stimulation to care and attention in manufacturing an article, so generally esteemed and so much used in families, besides adding a name equal if not superior to the southern states, for *Old Massachusetts' unexcelled butter.* I will in my next, (with your permission) forward you some observations on the making of butter, and instructions for using the patented churn, for new inventions are often condemned for the want of knowledge in using them. I may be very troublesome to you, my good sir, and the public, in long, and perhaps *tedious* disquisitions on making of butter, but a certain pride for my mother State, urges a necessity (if possible) of proving to the world that *Old Massachusetts*, will not be rivalled by any of the Southern States. My intentions are this summer, to have many experiments made to arrive at (if possible) the desired object of making butter equal, if not superior to any yet offered at our market. If I should happily succeed in obtaining this end through your means, the public must feel more indebted to you for this luxury than any one else.

Accept of my esteem, friendship, and regard,
Your obd't humble serv't.

Princeton, May 23, 1830. JOHN ERVING.

Oat Meal.—Loudon, in giving some notices of the agriculture of Angus, in Scotland, says, 'Much ridicule has been thrown on the Scotch, on account of their use of oat meal. This has been represented as inflaming the blood, and producing their favorite disease called the *Scotch* fiddle, and other cutaneous eruptions. But oat meal is as much used in some districts of England, as in any part of Scotland; and cutaneous eruptions are much more frequent in some of those districts than they are here, where they are seldom or ever heard of. The disorder ought rather be ascribed to dirty linen or clothing than to oat meal or any species of food. Oat meal, when it is sufficiently dilated with any sort of liquid, is known to be a laxative, aperient, wholesome, and at the same time a strengthening food for those engaged in hard labor. Engineers who superintend the excavation of canals have assured the reporter that those laborers who lived entirely on oat meal and milk, did a third more work than those who used butcher's meat, beer and spirits. All of the former saved money, while many of the latter involved themseives in debt. As this sort of work is done by the piece it affords a fair comparison, not only of the wholesomeness of oat meal in promoting health, but its power in supplying labor.

To obtain good Timber.—Bark the tree before it is cut down. By this means the alburnum is converted into wood.—*Loudon.* It is the sap in the alburnum, or white wood, which causes timber rapidly to decay. The sap contains saccharine matter, acids, and mucilage, which foment with heat, and bring on a decomposition of the wood. By the process recommended, the moisture is exhausted without fomentation, and the pores of the alburnum contract and harden. Soaking boards and timber in water renders the sap more thin, so that when taken out and exposed to the sun, it is more readily expelled. In the process of charring, the moisture is expelled; and not only this, but the coal [carbon] protects the timber from moisture, air, and heat, the great agents in the process of putrefaction. Charred wood is said to have been taken out of the ground at Constantinople, in a sound state, which had lain there seven hundred years.

Mustard Seed.—The common white and brown Mustard Seed, which grows with very little cultivation, and is easily gathered and cleaned by those who have clean floors for threshing wheat or flax seed, will always bring from three to four dollars per bushel, being in great demand for medical and culinary purposes. An acre of good land will produce from 15 to 20 bushels. The principal reason why the preference has been hitherto given to the European seed, is the superior manner in which it has been cleaned.

Native Stock.—Mr Ellis Hall of Raynham, has a Bull Calf, twelve months old, which weighs seven hundred and ten lbs.

LIBRARY OF USEFUL KNOWLEDGE.

[*Continued.*]

CHAPTER VIII.

INJURIES AND DISEASES OF THE SKULL—THE BRAIN—THE EARS—AND THE EYES.

We have now arrived at a convenient resting place in our somewhat dry, but necessary description of the different varieties of the horse, and we willingly turn to more practical matter. We will consider the injuries and diseases of this noble animal. In entering, however, on this division of our work, we would premise, that it is impossible for us to give the farmer such an account of the nature and treatment of the diseases of horses as will enable him with safety to practise for himself, except in the commonest cases. The causes of most diseases are so obscure: their symptoms so variable, and their connexion with other maladies so complicated and mysterious, that a life devoted to professional study will alone qualify a man to become a judicious practitioner on the diseases of the horse, and other domestic animals. Our object will be to communicate sufficient instruction to the farmer, to enable him to act with promptness and judgment when he cannot obtain professional assistance; to qualify him to form a satisfactory opinion of the skill of the veterinary surgeon whom he may employ, and, more especially, to divest him of strange and absurd prejudices which those in a variety of cases, not only produce and prolong disease, but bring it to a fatal termination.

FRACTURE.

The hardness of the parietal bones, which defend the cavity of the skull, is such, and the occiptical is so exceedingly thick that a FRACTURE of the bones of the skull is almost impossible. It can only occur from brutal violence, except that when a horse falls in the act of rearing, the occiptical bone is sometimes fractured; when he falls forward, and the head comes in contact with the ground, the muzzle or jaws will receive the principal or whole force of the blow. When, however, fracture of the skull does occur, it is almost invariably fatal. A blow of sufficient violence to break these bones must likewise irreparably injure the delicate and important organ which they protect.

The ridge, or outer and upper part of the orbit of the eye, is occasionally fractured. It happens from falling, or much oftener from violent blows. The slightest examination will detect the loosened pieces, but a professional man alone can here render effectual asistance. All, however, that he can do will be gently to replace the parts in their natural situation, and contrive to confine them there by adhesive plasters; to obviate inflammation by bleeding physic, and low diet, and leave the rest to nature.

We proceed then to the *diseases* of the head, and the first of these is PRESSURE ON THE BRAIN. This may be produced by some fluid thrown out between the membranes, or occupying and distending the ventricles of the brain. In the grown horse this rarely occurs, but it is well known to breeders as an occasional disease of the foal, under the name of 'water in the head.' The head is either very much enlarged, or strangely deformed or both; and the animal dies either in the act of foaling, or a few days after the birth.

MEGRIMS.

There is another kind of pressure on the brain, resulting from an unusual determination or flow of blood to it. This organ requires a large supply of blood to enable it to discharge its important functions. It is supposed that ten times more blood flows through the brain than through any other part of the frame of equal bulk. Nature in the horse more than in many other animals, has made some admirable provisions to cause this great quantity of blood to flow into the brain without much velocity, and thereby to lessen the risk of suddenly overloading it or rupturing its vessels. The arteries pursue their course to the brain in a strangely winding and circuitous manner; and they enter the skull through bony holes which will admit of the enlargement of the vessels only to a very limited extent: yet, from various causes, of which the most common is violent exercise in a hot day, and the horse being fat and full of blood, more than the usual quantity will be sent to the head:—or from some negligence about the harness, as the collar being two small, or the curb rein too tight, the blood will be prevented from returning from the head; and thus the larger vessels of the brain will be too long and injuriously distended, and, what is of more consequence, the small vessels which run through the substance of the brain will be enlarged, and the bulk of the brain will be increased, and it will press upon the origins of the nerves, and produce almost without warning, loss of power and consciousness.

The mildest affection of this kind is known by the name of MEGRIMS. It comparatively rarely happens when the horse is ridden; but should he be driven, and, perhaps, rather quickly, he may perform a part of his journey with his usual cheerfulness and ease, when all at once he will stop, shake his head, be evidently giddy, and half unconscious. In a minute or two this will pass over, and he will go on again as as if nothing had happened.

Frequently, however, the attack will be of a more serious nature. He will fall without the slightest warning, or suddenly run round once or twice, and then fall. He will either lie in *a state* of complete insensibility, *or* struggle with the utmost violence. In five *or ten* minutes he will begin gradually to come to himself; he will get up and proceed on his journey, yet somewhat dull, and evidently affected and exhausted by what had happened, although not seriously or permanently ill.

This is a very dangerous disease; dangerous to the horse, which will occasionally die on the spot, and peculiarly dangerous to those who drive him, for there will frequently be no warning or opportunity to escape. It likewise happens, that whether the vessels have been weakened by this violent distension, and afterwards offer less resistance to the flow of blood, or whatever be the cause, a horse that has once been attacked by megrims is very subject to a return of the complaint. No prudent man will drive a horse that has had a second attack, especially if, in the intermediate time, he has taken proper means to prevent a recurrence of the fit.

At the moment of attack, a person who is able to bleed should take three or four quarts of blood from the neck; or any one can cut the bars of the palate, whence a considerable and a sufficient quantity of blood may be readily obtained. The driver should pat and soothe the animal, and carefully examine the harness, and pursue his journey as gently as circumstances will permit. When he gets home, a dose of physic* should be administered if the horse can be spared, and the quantity of dry food lessened, and mashes given, or green meat, or the horse should be turned out at night or turned out altogether for two or three months.

APOPLEXY.

The attack sometimes assumes a still more violent form. The horse falls and dies at once. It then rather resembles, or is the same with apoplexy in the human being. To this more serious form of the disease he is subject in the stable, and even at pasture; but there is generally some warning. He will be seen with the head low, extended almost to the ground, and supported against the manger. He staggers as he stands, If moved, he appears as if he would fall. His sight and hearing are evidently affected. This is not mad staggers, for no inflammation of the brain is found; nor stomach staggers, for there is no distension of the stomach. The horse will continue in this way from one hour to twelve. He then falls; grinds his teeth; his eyes are open, protruded, and fixed; the pupil is dilated; there are twitchings about the frame; the muzzle is cold; the vein of the neck is evidenly swelled; he is unable to swallow; the drink is returned by the nostril or the mouth, and the dung often voided involuntarily; the twitchings increase to strong convulsions, and death speedily closes the scene.

If there be time for medical treatment, the course to be pursued is plain enough. Bleed copiously †; take at once eight to ten quarts. Bleed from a vein in preference to an artery, for an artery which supplies the brain cannot be got at. Bleed from the jugular or common neck vein, for that returns the blood from the brain, and a large quantity rapidly drawn from this vein may possibly give relief. Next back rake, or remove the dung from the lower intestine with the hand, and give a strong dose of physic; but the case is usually hopeless, and the most decisive and skilful treatment alone can avail. We decidedly object to two methods of cure adopted by some farriers, and farmers too. The first is, to blow pepper (and Cayenne pepper if they can get it) up the nostrils of the horse. The violent sneezing that will be produced if the animal is not too insensible must probably, or almost certainly, rupture some of the vessels already over distended. The other practice is to give spices and bark to rouse the animal. The effect of these would be to quicken the circulation, and to send yet more blood to that organ which already had a great deal too much.

STOMACH STAGGERS.

A disease not much unlike this is known under the name of STEGGERS. There are two varieties of it—the sleepy or stomach staggers, and the mad staggers; frequently, however, they are only different stages of the same disease, or varying with the cause that produced them. In STOMACH STAGGERS the horse stands dull, sleepy, staggering; when roused he looks vacantly around him; perhaps seizes a lock of hay, and dozes again with it in his mouth; at length he drops and dies; or the sleepiness passes off, and delirium comes on, when he falls, rises again, drops,

* By physic, whenever the word occurs in this Treatise, we mean purgative medicine.

† Full directions for bleeding will be given, when we describe the various operations which it may be necessary to perform on the horse.

beats himself about, and dies in convulsions. The cause of this is sufficiently evident; and the disease never occurs, except by the fault of those who have the management of the horse. It arises from over feeding. The horse has been permitted to get at a too great quantity of food, or food of an improper nature. When he has been kept for some hours without eating, and has been worked hard, and has become thoroughly hungry, he falls ravenously upon every kind of food he can get at; swallowing it faster than his small stomach can digest; and no water being given to soften it, and to hasten its passage the stomach becomes crammed, and having been previously exhausted by long fasting, is unable to contract upon its content. The food soon begins to ferment and to swell, causing great distension; the brain sympathizes with this overloaded organ, and staggers are produced. We can easily imagine this, when we remember the sad headaches occasionally arising from an overfilled or disordered stomach. Sometimes the stomach is ruptured.

We have little to say of the treatment of the disease so far as medicine is concerned, except that as it is almost or quite impossible for the person most accustomed to horses to distinguish between the early stage of stomach and mad staggers (distension of the stomach, and inflammation of the brain,) we should be most diligent and minute in our inquiry into the history of the horse for the preceding twentyfour hours—whether he could have got an undue quantity of food, or had been worked hard and kept long fasting. Some say that there is a yellowness of the eye, and twitchings about the breast in the early stage of sleepy or stomach staggers. We have seen a great many cases of stomach staggers without this yellowness or these catchings, and we believe that no one can certainly distinguish between the two, and that we must be guided entirely by the history of the case.

NOVASCOTIA SILK.

We were much pleased by the examination of a specimen of fine sewing Silk, the produce of silk worms hatched and reared in the province. We understand that Mr S. Chipman, Annapolis, has cultivated the mulberry tree, which affords sustenance to the worms, for some years past; the silk used by Mrs Chipman is all of *home manufacture*. The cultivation of the mulberry, and proper care in the management of the worms are, we understand, all that is required to produce quantities of Silk in the province.—*Halifax Recorder.*

PRESERVATION OF SMALL BIRDS.

Remove the viscera, brain, eyes, and tongue with a hooked wire, fill all the cavities with antiseptic paste, or cotton saturated with it; bind the bill and wings with thread; hang it up by the legs, pour from one to two ounces of ardent spirits into the vent, and leave it to dry in an airy place. The paste is made with eight parts of white arsenic, four parts of Spanish, and one part of soft soap, and three parts of camphor, with a few drops of alcohol.—*Magazine of Natural History.*

How often have I heard farmers reply to an observation on the tardy growth of turnips,—'*they will not grow apace till the leaves are large enough for the wind to take hold of them;*' and this is only because plants cannot be healthy and vigorous without exercise. Mr Knight found that trees which were regularly shaken every day in his green house, grew more rapidly and strong than others which were kept still.—*New York Farmer.*

CURE FOR FELONS.

We have been assured by a gentleman who has recently had an opportunity of satisfactorily testing the fact, that a plaster made of soft soap and the strongest lime that can be produced, in equal portions, is a certain remedy for those disagreeable and painful diseases called felons.—*Lynchburg Virginian.*

Captain Luther Bridges of Hopkinton, had new Potatoes of this year's growth sufficiently large for the table, on the 29th of April.

It is stated that in the town of Lyndon, Vt. there were manufactured during the present season, fifty tons of maple sugar.

[Extract from a Report to Congress on American Canvas, Cables and Cordage.]

On the culture and preparing the hemp in Russia, transmitted by the Hon. J. Q. Adams, Minister at St Petersburgh, March, 1810.

In Russia, when the season is mild, the hemp seed is sown about the 1st of June, old style. The richer the soil of the land employed for it the better. A chetwirt of seed, (100 chetwirts are equal to 73 quarters, Winchester measure, is sown on a piece of land of 80 fathoms (English feet) long and 60 fathoms broad.

The land is first ploughed and harrowed, and, about two hundred single horse loads of dung being spread upon it, it is left for six days, when it is again ploughed, and the seed sown and harrowed the same day. In about four months the seed becomes ripe, and the hemp is then pulled up with the roots; if it be allowed to remain too long in the ground, it is apt to become harsh. It is bound into heads or bunches of four handfuls each; these are hung upon sticks placed horizontally, thus: ×—0—0—0—0—0—0—× and allowed to remain so for two days. It is then made into *cut* or *threshed* hemp as may be agreeable. The cut hemp, is made by chopping off the heads containing the seed. These are put into the kiln, and after remaining there for eighteen hours, the seed is beaten out.

If threshed hemp is to be made, the heads or tops must not be cut off, but the bunches of hemp placed entire in the kiln; and, if the weather be warm, it will be sufficiently dry in three days, when the seed must be thrashed out of the heads. In either case, three days after the seed is separated from it, the hemp must be put to steep or rot, either in a stream or a pond, and that the hemp may be entirely immersed, it is put under wooden frames |=======| upon which stones are placed, or where they are not to be had, earth is substituted, after the frames are covered with planks.

The clearer and purer the water, the better will be the color of the hemp. Where the water is warm, three weeks steeping will be sufficient; but, if cold, as in rivers, springs, &c, five weeks or longer may be necessary. At the expiration of this period, a head of the hemp is taken out and dried; if, on beating and cleaning it, the husk comes off, the hemp may then be takenout of the water; but, if the husk still adheres to it, it must be allowed to remain some time longer. This trial must be repeated from time to time, till the husk separates, when the hemp must be taken out of the water, and suspended to dry, as directed before, on its being taken off the ground.

The hemp is now made into the two sorts, distinguished by the names of *spring* and *winter*, the former being dry, and rather of a withered appearance, the latter more moist, and of a fine brownish green color, containing more of the vegetable oil, and therefore the most apt to heat, though, if not shipped at St Petersburgh or Riga before September there is not much risk of its heating any more on board the ships, especially on short voyages, as to England, and are the best fit for cables. If it be intended that the hemp should be early ready for the market, it is made into winter hemp by the following process. On being taken out of the water, it is left suspended in the open air for about a fortnight, when it is put into the kiln for about twentyfour hours, after which it is broken by means of a handmill, and the husk is then beaten off by striking the heads obliquely with iron and wooden instruments, of the shape of a large two-edged knife; lastly to unravel it, it is drawn through a wooden comb, or card, with one row of wide wooden teeth, fixed perpendicularly.

The hemp is then laid up or suspended in sheds, and is fit to be sorted, bound into bundles, and loaded into the barks.

The hemp to be prepared as spring hemp, is allowed to remain suspended and exposed to the weather the whole winter, until it be dried by the sun in the spring, when it is broken and cleaned in the same manner as the winter hemp.

As the greatest part of the summer elapses before it can be made fit for the market, none of this hemp reaches St Petersburg until the following spring, that is, two years after it was sown.

The hemp is sown in the same manner as linseed, rye, or wheat. Land of a sandy soil may also be employed for it, but it must be strongly manured; otherwise it will be too short, and a flat country should always be preferred.

One chetwirt of seed commonly yields 25 loads (upwards 36 pounds English) of hemp, and twelve chetwirts of hemp seed.

Cure for the Stone.—The following is copied from an old Almanac; where it is stated that a slave in the southern states received his freedom for disclosing the remedy: 'Take one gill of the expressed juice of horsemint, and one gill of red onion juice every morning and evening till the cure is perfected. White onions will not have the same effect as red; and in order to obtain the juice of the latter, they may be cut in thin slices, well salted, and bruised between two pewter plates. It is, however, the juice of the horsemint which possesses the most virtue in this disorder; and a strong decoction of this will generally, in time, effect a cure.

Seed Corn.—A southern paper states that a gentleman finds, by a series of experiments, that the kernels from the butt end are far better for seed corn than from any other part of the ear. The nearer the seed is taken from the butt end, the larger will be the ears. He also recommends that those ears of corn which ripen first in the field, should be selected for seed.

NEW ENGLAND FARMER.

BOSTON, FRIDAY, JUNE 4, 1830.

WATERING PLANTS.

A copious supply of water is very essential to a good garden. Loudon remarks that 'many kitchen crops are lost or produced of very inferior quality, for want of watering. Lettuces and cabbages are often hard and stringy; turnips and radishes do not swell; onions decay; cauliflowers die off; and in general in dry seasons all the *cruciferæ*, (flowers with petals in the form of a cross) become stinted, or covered with insects, even in rich, deep soils. Copious waterings in the evenings, during the dry seasons would cause that fulness and succulency which we find in vegetables produced in the low countries, and in the Marsh Gardens at Paris, and in England at the beginning and latter end of the season.

'Watering is requisite for various purposes, as aliment to plants in a growing state; as a support to newly transplanted plants; for keeping under insects; and keeping clear the leaves of vegetables. One general rule must ever be kept in mind during the employment of water; that is never to water when the sun shines. A moment's reflection will convince any one that this rule is agreeable to the laws of nature, for during rain the sun's rays are intercepted by a panoply of fog or clouds. All artificial watering, therefore, should be carried on in the evening or early in the morning, unless it be confined to watering the roots, in which case transplanted plants, and others in a growing state may be watered at any time, and if they are shaded from the sun, they may also be watered over the tops.'

The water used for watering vegetables, if taken from a well or a cold spring, should be exposed one day at least to the shining of the sun, otherwise it will give a chill to the plants. Only a small quantity should be applied at once that it may have an effect similar to that of a refreshing rain: for water applied too plentifully sometimes washes away the finest of the mould from the roots or makes little cavities about them, which admit too much air.

TAR FOR SHEEP.

A gentleman who keeps a large flock of sheep assures us that during the season of grazing, he gives his sheep tar at the rate of a gill a day to every twenty sheep. He puts the tar in troughs, sprinkles a little fine salt over it, and the sheep consume it eagerly. This preserves them from worms in the head, promotes their general growth, and is supposed to be a specific against rot.

COMPOSITION FOR GRAFTING.

The following composition, we are assured has for some time been made use of by the Messrs WINSHIP, at their valuable nursery in Brighton, and by them preferred to any other. Three parts rosin; three parts bees' wax; one part tallow. Melted and mixed while hot.

WASH FOR FRUIT TREES.

The very valuable wash for fruit trees, recommended by BENJAMIN WHEELER, Esq. of Framingham, Mass. is as follows. 'Dissolve two pounds of potash of the first quality in 7 quarts of water for the bodies of the trees. If the limbs are covered with moss or lice, I take a painter's brush and apply the solution to the moss, &c, with care not to touch the leaves or buds. It may be done at any time of the year, when we are most at leisure. Once in from two to four years is generally sufficient. I have no general rule, however, but wash them as often as they appear to need it, which is always when the bark is not smooth.'

Messrs F. & J. WINSHIP, Proprietors of the Brighton Nursery, near Boston, say that 'five years ago, we were exceedingly troubled with the Apple tree Borer, having, at the same time, several thousand trees infested with them. We applied the wash, as recommended by B. WHEELER, Esq. of Framingham, and have continued it every season since, the first week in June, in pleasant weather, on from five to ten thousand trees annually. The effect has been astonishing; not only effectually preventing the destructive effects of the borer, but killing immediately the moss, and destroying those other insects, usually found impeding the good health of the tree, also resuscitating and invigorating every kind of tree we have applied it to. We should recommend as a general wash, one pound of potash to six pints of water. And for promptness of execution the mariner's long handled tar brush, which may be had at the Agricultural Warehouse, North Market-street, or the common paint brush will answer. Every other year will answer as a remedy against the borer, although the horticulturist will find himself richly rewarded by a more frequent application.'

It will be seen that the solution of potash recommended by Messrs WINSHIP, is somewhat stronger than that which Mr WHEELER prescribes. That of the former is one pound of potash to three quarts of water, and Mr WHEELER advises two pounds to seven quarts. Whether any advantage is derived from increasing the strength of the solution we cannot say. There is, however, a difference in the strength of what the chemists call the carbonate of potash, and a little more or less of strength in the solution is probably of little consequence.

Mr WHEELER, in conversation a few days since expressed an opinion founded on some experience of the virtues of his wash, that it would preserve trees against the *canker worm*, as well as other insects. Should that prove to be the case, the discovery will be of incalculable value, as the canker worm, is, perhaps, the most formidable of the insects which infest our orchards. We think, however, that further experiments should be made before it can be positively asserted that the mixture above described will preserve against the canker worm.

PRESERVATION AGAINST INSECTS.

This, it was supposed, could be effected by boring a hole in the stem or branch of an infected tree, filling it partly with quicksilver and plugging it up. The destructive quality of this mineral was expected to diffuse itself throughout the whole structure of the plants, and of course destroy or offend the insects. But this expedient has been found to be completely nugatory.—*Gardener's Magazine.*

Some of our readers may recollect, that plugging up sulphur in trees has been proposed as a remedy against caterpillars and other insects, but found inefficient. The fact is that the means used in such cases, are not adequate to the end proposed. We might as well attempt to turn a running stream into wine by throwing grapes into its fountain head.—*Ed. N. E. Farmer.*

SAYINGS AS TO BEES.

Is the following current in any other county than in Norfolk? (England.)

A flight in May is worth a load of hay.
A flight in June is worth a silver spoon.
A flight in July is not worth a fly.

Gardener's Magazine.

The above aphorisms are current in New England, and have been so from 'time whereof our memory runneth not to the contrary.'—*Ed. N. E. Farmer.*

We have been presented with a Cultivator which was invented by ISAAC COBB of Westminster, Vt. which we think to be far superior to any other we have ever seen in use. It is intended principally for working in the drill, and is so constructed that the share will cut up all the weeds between the rows, and the harrow will rake them out, and when the harrow gets clogged it can be raised by a handle for the purpose of clearing it without disturbing the share; there is a wheel through the beam which governs the depth, which makes the management of the Cultivator more easy. One of the above machines may be seen at the Agricultural Warehouse, where they will be for sale.

LARGE APPLE TREE.

In answer to our correspondent, Mr Ives, page 343, we stated that there is on the farm of CHAS. TAPPAN, of Brookline, an apple tree, which, one foot from the ground, measures nine feet in circumference.

Salubrious qualities of the Strawberry.—Every friend to the fair will be glad to diffuse the knowledge of a pleasant dentrifice and infallible sweetener of the breath. The common strawberry in a ripe state, when rubbed upon the teeth and gums, has these most agrecable influences, and becomes more efficacious if eaten freely. The celebrated Linnæus cured himself of gout by persevering in a regimen of strawberries.

Remedy for poisoned Animals.—Raw eggs given to sheep and cattle which have been poisoned by eating laurel or ivy leaves, it is said, will effect a speedy cure. The dose is, 1 egg for a sheep, 4 for a cow. They can be administered by simply breaking the shell and slipping the yolk and as much of the white as is practicable, down the animal's throat.

FOR THE NEW ENGLAND FARMER.

LARGE TREES.

MR FESSENDEN—In the town of Raynham, in the county of Bristol, Mass. near my dwelling house stand two apple trees; the circumference of one is thirteen feet five inches one foot from the ground, and twelve feet two inches three feet from the ground; the other tree twelve feet two inches one foot from the ground, and eleven feet six inches three feet from the ground. The fruit is of a peculiar sort, in eating in March and April, and keeps till June. Tradition states the tree to be 130 years old. About the year 1780, one hundred and one bushels of apples were gathered from these 2 trees, exclusive of windfalls. However incredible this may appear it can be proved. The trees are now on the

decline, and last year bore between thirty and forty bushels.

There is also a Yellow Willow standing about 10 rods from the above mentioned apple trees, which measures 17 feet in circumference 18 inches from the ground; the branches of this tree extend over a tract of land five rods and four and a half feet in diameter.

Yours truly, E. HALL.

Raynham, May 31, 1830.

Burning the vines of Strawberries.—A gentleman in this vicinity has this season tried the experiment of burning the vines of strawberries as recommended by Rev. Dr Miller in the New England Farmer, vol. vi. page 233. The experiment has succeeded perfectly—the vines having now a most vigorous growth, and promise of a great crop of fruit. Dr Miller states that his vines treated this way yielded their fruit not only in a more convenient succession, but at least a third more in quantity, than others in the same soil.

The London World of the 21st April, says, 'Thousands of the most industrious, upright, and skilful men of the country are emigrating to America.'

EXHIBITION OF FLOWERS, &c, May 29, 1830.

MASSACHUSETTS HORTICULTURAL SOCIETY.

At the exhibition of Flowers, &c, at the Hall on Saturday, 29th May, 1830, the following report was made by the committee: fine Specimens of Prillium Cerneum, Arum Triphyllum, Sisyrinchum Anceps, Saxifraga Pennsylvanica, Myosolis Palustris, Veratrum Verede, Cypripedium Acaulis, Prunus Obovata, Menyanthis Trifoliata, Sarracenea Purpurea, Sinecio Aureus, Geum Rivale, Eriophorum Angustifolium, Arathusa Bulbosa, Lathyrus Palustris, Iris Versicolor, Native Plants, collected by JNO. L. RUSSELL.

Anchusa leptophylla, or blue flowered Bugloss, Pæonia Officinalis, Geranium Maculatum, Snowballs, and several varieties of Columbines from S. DOWNER.

Calceolara Corimbosa, Geranium Prince Leopold, Antholyza Praalta, Sinecio Elegans, from B. P. HOVEY, Jr.

Lupinus Perennis, Cypripedium Acaulis, from Mr CHANDLER

Geranium Davianum, Geranium Lady Scott Douglass, two very fine Varieties of Geraniums from seed, Geranium Duchess of Clarence, two Varieties of China Chrysanthemums, and Tea Roses, from D. HAGGERSTON.

Mr R. TOOHEY of Waltham, exhibited specimens of Perkims' Early Seedling Potatoes; also, String Beans, Cucumbers, and Mushrooms, all of fine appearance. Mr TOOHEY deserves much credit for his skill in forcing these vegetables. June 4.

To CORRESPONDENTS.—A valuable article on the injurious effects of digging or ploughing the ground round the roots of Fruit Trees, was received too late for this week's paper. Some editorial remarks on the same subject, were previously prepared, which we are also obliged to defer till next week, as well as many other articles.

The Ferrol Grape.

The Subscriber has received from St Ubes, a few of the vines of the Grape, known there as the FERROL.

The Fruit is nearly black when ripe, of an oval shape, delicious in flavor, and the berries about the size of the large oval Malaga. It is very highly appreciated by those who have tasted it, and is said to be a great and constant bearer.

A few of the vines are for sale by Z. COOK, Jr.
June 4. 4t.

Sportsman.

The full blooded horse Sportsman will stand at B Taft's stable in Brighton, on Mondays and Tuesdays, until noon; at Brigham's in Westborough on Wednesdays; at Estabrooks' in Shrewsbury, on Thursday; and at Stockwell's in Worcester, on Fridays and Saturdays, until 2 o'clock of each week through the season.
May 28.

Choice Perry.

A few dozen bottles of Choice Perry, made in New Hampshire, for sale at J. B. RUSSELL's Seed Store, 52 North Market street, at $2,00 per dozen. June 4.

Turnip Seed, &c.

For sale at the Seed Store connected with the New England Farmer Office, 52, North Market-street,

An extensive assortment of Turnip Seeds, of the most valuable sorts for family use or stock. The most approved kinds for the farmer, are the White Dutch, White Stone, Yellow Stone and Yellow Malta. The two latter are of uncommon excellence, and keep well. Loudon describes the Yellow Malta as 'an excellent and beautiful root,' and of delicious flavor. Of the sorts for field culture, the White Norfolk, Yellow Aberdeen, White Flat, and Ruta Baga, are the best. The Yellow Aberdeen is most approved among the Farmers of England and Scotland, as it grows to a large size, is very sweet and nutritious, and keeps till June. The above seeds were saved in Europe expressly for this Establishment, and the utmost dependence may be placed on their genuine quality.

Also, a variety of Long and Turnip rooted Radishes, suitable for sowing the ensuing months, Long Prickly, and many other varieties of Cucumbers for pickling.
May 28.

Lost.

On the 27th of March last, a package of Books, consisting of Loudon's Encyclopedia of Plants, and Loudon's Gardeners' Magazine, was left at the New Bedford Wagon Office, in Boston, directed to BENJAMIN RODMAN, Esq. New Bedford, which has never been received. Whoever will give any information respecting it to Mr RODMAN, at New Bedford, or to Mr RUSSELL, at the New England Farmer Office, Boston, shall be suitably rewarded. tf. May 28.

Agricultural Implements.

For sale at the Agricultural Warehouse 52 North Market-street,

Pickering's improved Tree Brushes, for destroying Caterpillars; long and short handled brushes, for washing trees; Vegetable Brushes; Brushes for tarring trees; Horse Brushes &c.

Willis' improved Brass, Copper, and Tin Syringes, for cleansing grape vines and preventing mildew, see N. England Farmer vol. 8, p. 5, a communication from William Prince, Esq.

Lactometers; a few well finished Lactometers, some with extra large size glasses.

Pruning Knives Shears, &c.; Wakefield's Improved Pruning Shears, Fruit Shears, Garden, Grass, and Hedge Shears-Pruning Saws, Chissels, &c.

Pruning and Budding Knives; a few very superior Ivory handled Budding and Propagating Knives. may 21.

Glass, Cheap.

40 Boxes 6 by 7 Window Glass, suitable for Green Houses or Hot-beds, with an extensive assortment of all other sizes, for sale by Loring & Kupfer, No. 10, Merchants' Row. 3m March 12.

Dahlia Roots, &c.

For sale at the Seed Store connected with the New England Farmer, 52, North Market-street,

A good assortment of *Double* Dahlia Roots, with the colors marked on each, at the low price of 50 cents each. Also, Jacobean Lilies, at 25 cents—and Double Tube Roses at 25 cents each. may 7.

Roman.

This very elegant, full blooded horse, imported with a hope of improving the breed, will stand this season at the farm of Mr Stephen Williams, in Northborough, County of Worcester, where some of his stock may be seen.

Roman was purchased in England, of the Earl of Warwick, and his pedigree has been traced in the New Market Studbook from Childers, the swiftest horse that ever run over New Market course, through eight generations of the highest bred horses and mares in England, without a single cross of inferior blood. At 4 years old he won 5, and at 5 years old he won 4 prizes, and has since beat some of the fleetest horses in England, over the most celebrated courses.

His color a very bright bay—black legs, mane, and tail—walks and trots well—is very good tempered—high spirited—active—15 1-2 hands high, and is considered by judges as handsome and well formed a horse as can be found in the country.

Mares have been repeatedly sent to him from Maine, Rhode Island, and Connecticut, as well as from the remote counties in this State, and the neighboring towns, and his colts are handsome and command high prices.

Terms—$20 the season, to be paid before the mares are taken away.

Northborough, Mass. may 21, 1830.

Wilmot's Superb Strawberry.

For sale at the Seed Store connected with the New England Farmer, 52 North Market-street,

Several roots of Wilmot's Superb Strawberry, in pots, one thrifty plant to a pot—price 12½ cts.—also a few pots with 4 plants to each, in fine order, most of them being in flower, and many with the fruit set, 37½. May 7.

Powder at 2s per lb.

DUPONT'S POWDER, quality warranted, for sale at *Copeland's Ammunition Store*, 65 Broad st, at *retail*. Also SHOT, CAPS, &c. of the *best quality*—cheap for cash.

Garden Beans.

For sale at the Seed Store connected with the New England Farmer, 52, North Market Street,

A large variety of the most esteemed Garden Beans cultivated in this country, comprising the following sorts:

Pole or Running—Large Lima, Small Lima, *very fine*, Case Knife, White, Red, Speckled, and Yellow Cranberry, White and Scarlet Dutch Runners.

Dwarf—Early Mohawk, Early Six Weeks, Early China, Early Canada, Large White Kidney, Early Case Knife, Cream Colored Red Cranberry, Rob Roy, Warrington or Marrow, Quaker, Refugee, or Thousand to one, &c.

PRICES OF COUNTRY PRODUCE.

			FROM	TO
APPLES, best,		barrel.	2 25	3 00
ASHES, pot, first sort,		ton.	102 00	108 00
Pearl, first sort,		"	120 00	130 00
BEANS, white,		bushel.	87	1 12
BEEF, mess,		barrel.		9 00
Cargo, No. 1,		"	7 25	7 50
Cargo, No. 2,		"	6 25	6 50
BUTTER, inspected, No. 1, new,		pound.	10	13
CHEESE, new milk,		"	6	8
Skimmed milk,		"	2	3
FLOUR, Baltimore, Howard-street,		barrel.	5 12	5 25
Genesee,		"	5 12	5 25
Rye, best,		"	3 62	3 87
GRAIN, Corn,		bushel.	53	55
Rye,		"	65	67
Barley,		"		67
Oats,		"	35	40
HOG'S LARD, first sort, new,		cwt.	8 00	8 50
HOPS, 1st quality.		"	14 00	15 00
LIME,		cask.	85	90
PLAISTER PARIS retails at		ton.	3 75	4 00
PORK, clear,		barrel.	16 00	17 00
Navy, mess,		"	12 25	12 75
Cargo, No. 1,		"		12 50
SEEDS, Herd's Grass,		bushel.	1 75	
Orchard Grass,		"		3 00
Fowl Meadow,		"		4 00
Tall Meadow Oats Grass,		"		3 00
Red Top (*northern,*)		"	62	75
Lucerne,		pound.	38	50
White Honeysuckle Clover,		"		33
Red Clover, (northern)		"	7	8
French Sugar Beet,		"		1 50
WOOL, Merino, full blood, washed,		"	40	50
Merino, full blood, unwashed,		"	20	30
Merino, three fourths washed,		"	35	40
Merino, half blood,		"	33	35
Merino, quarter washed,		"	30	33
Native, washed,		"	30	40
Pulled, Lamb's, first sort,		"	40	45
Pulled, Lamb's, second sort,		"	30	35
Pulled, " spinning, first sort,		"	33	35

PROVISION MARKET.

CORRECTED EVERY WEEK BY MR HAYWARD,

(Clerk of Faneuil-hall Market.)

BEEF, best pieces,	pound.	8	10
PORK, fresh, best pieces,	"	8	10
whole hogs,	"	5	6
VEAL,	"	3	7
MUTTON	"	4	12
POULTRY.	"	10	16
BUTTER, keg and tub,	"	12	14
Lump, best,	"	15	18
EGGS,	dozen.	10	11
MEAL, Rye, retail,	bushel.		85
Indian, retail,	"		80
POTATOS,	"	20	25
CIDER, [according to quality,]	barrel.	3 50	4 00

BRIGHTON MARKET—*Monday, May* 31.

(Reported for the Centinel.)

152 Beef Cattle at Brighton and 8 at Charlestown, making 160 in all. Prices $4,75 to $5,50 per cwt.; and from 190 to 200 Sheep and Lambs, which sold from $1,75 to $2 42 per head. About 6 or 8 pair of Working Cattle, prices from $30 to $50 per pair—and about 20 Cows and Calves, prices not known—and no Shoats.

MISCELLANIES.

PULMONARY CONSUMPTION.

Vigorous exercise, and a free exposure to the air, are by far the most efficient remedies in pulmonary consumption. It is not, however, that kind of exercise usually prescribed for invalids—an occasional walk or ride in pleasant weather, with strict confinement in the intervals—from which much good is to be expected. Daily and long continued riding on horseback, or in carriages over rough roads, is, perhaps, the best mode of exercise; but where this cannot be commanded, unremitting exertion of almost any kind in the open air amounting even to labor, will be found highly beneficial. Nor should the weather be scrupulously studied. Though I would not advise a consumptive patient to expose himself recklessly to the severest inclemencies of the weather I would nevertheless warn him against allowing the dread of taking cold to confine him on every occasion when the temperature may be low, or skies overcast.

It may be told that the patient is often too feeble to be able to bear exertion; but, except in the last stage, where every remedy must prove unavailing. I believe there are few who cannot use exercise without doors; and it sometimes happens, that they who are exceedingly debilitated, find upon making the trial, that their strength is increased by the effort, and that the more they exert themselves, the better able they are to support the exertion.

The Season in Pennsylvania.—We have hardly known the fields to have a more beautiful appearance than at present. The fields of grain are said never to have looked better at this season of the year. There having been no frost to do damage, there is a prospect of an abundance of fruit. Vegetation is uncommonly forward. We saw on the island opposite this place, last week, an acre of peas in full bloom and red clover in blossom.—*Harrisburg, Pa. Intelligencer, of May* 11.

GARDEN WALKS.

The following cheap improvement is recommended in the construction of walks in gardens, lawns, &c, uniting the advantages of great hardness, durability, and freedom from worms and insects:—When a new walk is made, or an old one reformed, take the necessary quantity of road scraping, previously dried in the air, and reduced as fine as possible; mix with the heap enough of coal tar from a gas work, so that the whole shall be sufficiently saturated, and then add a quantity of gravel; with this lay rather a thick stratum as a foundation, and then cover it with a thin coating of gravel. In a short time the walk will be as hard as a rock, not affected by wet, or disfigured by worms.—*County Chronicle.*

The North Western Journal, published at Detroit, strongly recommends the establishment of Agricultural Societies in Michigan territory; and measures are taking to obtain some encouragement from the Legislature. It is thought that the territory now contains about fifty thousand inhabitants.

From the Boston Centinel.

FRESH BUTTER.

Messrs Editors—You recommend in your last number a *new* mode of preserving butter, and I here send you an *old* and a better method, because it is more, simple, pure, and without *a particle of salt*, honey or sugar. I say without a particle of salt, *nitric* or *common*.

If all the vessels used be perfectly clean and wiped dry, and the butter come quick, (for butter that is a long time churning is already half spoilt) you have to work out the butter milk *entirely*, by repeated and unwearied working or kneading it, till you are satisfied that there is not a teaspoonful of the butter milk left in a mass of a dozen pounds, then press it into a stone pot, perfectly clean and *dry*; and in this state of purity and compactness, you may carry it to Europe or Asia, and find it at the end of your voyage as sweet as a rose in June, provided you have excluded the air from it by parchment or white wax, or spermaceti, when put on to it almost cold. The whole philosophy of the operation depends on excluding milk, and water, and air, and preserving the mass in a moderate temperature of warmth; better below 50° than above it. One of our countrymen, who went in a public character to Spain, had butter made at Nauchant Island, and thus managed, and found it perfectly sweet on his arrival.

What a mess must butter and honey make when mixed together. When Isaiah says '*butter and honey shall he eat*,' it is an exquisite Asiatic figure to denote a fertile land fragrant with flowers, but not to mix them together in the same dish.

It is remarkable that neither Grecian or Roman writers ever mention butter. It does not appear they had any knowledge of the article. It came down to us through the Arabians, and is one evidence more of the authenticity of the Old Testament. Instead of speaking scornfully of the Arabian as in the manner of some, let us tell our children when they ask for butter or sugar, that we are indebted to those Mahomedans for both these delicious articles of a good breakfast, as well as for all those figures they use in their cyphering books. BUTTEROPHILUS.

Middlesex, May, 1830.

The farmers in Illinois are paying attention to the culture of fruit trees. The Jacksonsville Gazette states that 2000 fruit trees were sent to Galena, this spring, all of which were purchased a few days after their arrival.

The model of an invention relative to Rail Roads, made by Mr Ely, of N. York, the inventor of the Baltimore Screw Dock, is now at the Exchange for the inspection of the public It is designed to supersede the necessity of inclined planes, and, to overcome elevations in a manner very nearly resembling a lock on a canal. The horse with his load passes from the lower level of the Rail Road upon a frame, in the middle of which an endless floor revolves upon two drums. To the axles of these drums are affixed cog-wheels which turn boxes fitted upon long perpendicular screws, by means of which the frame, with both horse and load, is elevated to the height above, and they immediately pass to the upper level. Weights are attached to the frame, to counterbalance the load. The time which it is thought will be necessary to pass an elevation of ten or fifteen feet will not exceed that required in the passage of an ordinary lock on a canal, and the power which draws the load will be quite sufficient to elevate it.—*Balt. Amer.*

RAW SILK,

Such as it issues from the wheels of the filature, will always command from five to seven dollars the pound, and the extreme fineness of American silk may increase its value, in the markets of Europe, to eight or ten dollars. We shall probably at some future day, see American *Raw Silk* quoted, in *prices current*, along with Turkey and Italian Silks; as sea island and upland are now quoted by the side of Egyptian and Maranham.—*Traveller.*

LEECHES.

A new invention for the speedy and certain application of leeches is announced; it is made with brass wire, much the form and size of a bell. The leeches having a great antipathy to brass wire, attach themselves to the skin, and in general, immediately commence the operation of puncturing and suction.

RAIL ROADS.

A meeting of citizens of Clinton and Essex counties, New York, has been held, when they pledged their cooperation in making a Rail Road from Boston to Ogdensburgh.

Horseradish cut into small pieces and chewed in the mouth is an excellent remedy for hoarseness, coughs, colds, or cases of incipient consumption. Several cases of its successful application have come within our knowledge.—*Manchester Herald.*

A small sharp piece of steel having snapped into the eye of a jeweller in Providence, the physicians were averse to operate on it, considering the delicate nature of the eye; another jeweller drew it out with a magnet.

Pomological Magazine.

Lost,—the 23d number of the London Pomological Magazine, for September, 1829. Whoever has borrowed it, is requested to return it to Mr Robert Manning, at Salem, or to the office of the New England Farmer.

May 28. 3t.

Massachusetts Horticultural Society.

A stated meeting of the Society will be held at their Hall, on Saturday, June 5th, at 11 o'clock, A. M.

ROBERT L. EMMONS,
Recording Secretary.

May 28.

Cabbage, Cauliflower and Broccoli Plants.

For sale at the Seed Store connected with the New England Farmer Office, 52 North Market street,

Vigorous Plants of the Early York and Early Savoy Cabbages, at 12 1-2 cents per doz.; also Early Cauliflowers, and Large Purple Cape Broccoli Plants, at 25 cents per doz. in prime order for transplanting.

Fales' Hoes.

French & Emmons, No. 31, South Market-St. have just received a supply of J. & A. Fales' Patent Hoes.—Fire Brick and Slabs for furnaces constantly for sale.

April 2. 2m

Published every Friday, at $3 per annum, payable at the end of the year—but those who pay within sixty days from the time of subscribing, are entitled to a deduction of fifty cents.

☞ No paper will be sent to a distance without payment being made in advance.

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